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EXAMINER

HAMMER, KATIE L

ART UNIT	PAPER NUMBER
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1761

NOTIFICATION DATE	DELIVERY MODE
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05/16/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/577,776	Applicant(s) SOMOGYI ET AL.	
	Examiner KATIE HAMMER	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2011 and 05 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9,11,12,19,20 and 24-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9,11,12,19,20 and 24-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to Applicant's Remarks filed on February 24, 2011 and January 5, 2011. Claims 1, 3-7, 9, 11-12, 19-20, 24-41 are pending for examination. Claims 1, 12 are currently amended. Claims 2, 8, 13-18, 21-23 are cancelled. Claims 35-41 are newly added.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-7, 9, 11-12 and 19-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 16-21, 23-29, 31-40 of copending Application No. 11/628,659. Although the conflicting claims are not identical, they are not patentably distinct from each other because App.

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No. 11/628,659 claims a similar process for dyeing leather comprising applying one anionic polyazo dye F with at least one alkaline-activatable group of similar formula A (see claims 16, 21 of App. No. 11/628,659), the process where the dye F is at a pH from 3-6.5 and then at least 8 (see claim 26 of App. No. 11/628,659), dyeing by a one-stage process, before retanning, and at a temperature range of 10-60 degrees Celsius (see claims 27-29 of App. No. 11/628,659), per the requirements of instant claims 1-12 and 19-20 of the instant invention.

Although App. No. 11/628,659 claims a similar method, the conflicting claims are not identical because App. No. 11/628,659 requires an anionic polyazo dye F with at least 3 diazo groups and group A where X is a C₁-C₄ alkyl or alkoxy and the instant claims require one dye F and group A where X is an electron-attracting radical, wherein the instant claims.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize such a process for dyeing leather by incorporating any type of dye. Such modification would be obvious because one having ordinary skill in the art would expect such a process to have similar properties to those claimed as the dye composition itself does not distinguish it from the process steps.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the active process steps for dyeing the leather, besides just the pH of the dye bath.

As currently claimed, the process only comprises treatment with an aqueous float comprising at least one dye F or a metal complex thereof at a pH of from 8.5 to 11. However, the instant specification examples teach several different pH values used, including acidic pH ranges, throughout the dyeing process and time periods at designated pH levels (see page 72 for the start of the dyeing examples). The Test Report filed on 8/28/2009 further confirms that multiple pH values and multiple method steps are used in the leather dyeing process and thus additional method steps need to be present in the instantly claimed method in order to clearly define the scope of the instant claims. Also, how is the dye bath maintained at this pH? Are chemicals added? How long does the leather remain in the dye-bath? Active method steps are required, as these are **process** claims.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, the electron-attracting radicals represented by (X) are not defined by the instant claim language of claim 1. What is the definition of an electron-attracting radical? Also, what is Q, the alkaline detachable group?

Appropriate correction and clarification is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

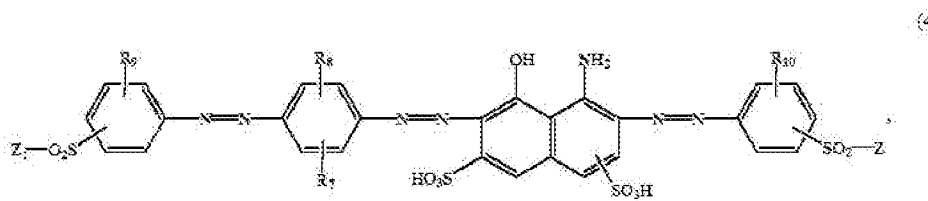
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-7, 19-20, 24-26, 30, 33, 38, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruhlmann et al. (US 5,964,900) in view of Rosenbusch (DE 2638236 A). For ease of examination, all references to the Rosenbusch text are to the Derwent Abstract Acc. No. 1978-19783A.

As to claim 1, Ruhlmann et al. teaches a process for dyeing leather, comprising contacting said leather with a float that comprises at least one dye F which has at least one group represented by formula A as instantly claimed where X is an electron-attracting radical, wherein at least one radical X is present and is an SO₃H group (see col. 1, lines 32-65, sulfo groups in the reactive dyes may generally be present in the form of the free acid, -SO₃H), k is 1, n is 0, B is a CH₂CH₂-Q group where Q is an alkaline-detachable group, and wherein said at least one dye is selected from the dyes of the general formulae (II) where Dk¹ is a formula of radical A, the Napht¹ is substituted

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by $-\text{OH}$ and $-\text{NH}_2$, and one $-\text{SO}_3\text{H}$, subscript $p=1$, Kk^1 is an aromatic radical derived from benzene, Dk^2 is also a radical of formula A, subscript $m=1$, B is $\text{CH}_2=\text{CH}_2$ group, the subscript $n=0$, and the subscript $k=0$, B is a $\text{CH}_2-\text{CH}_2-\text{Q}$ group wherein Q is an alkaline detachable group (reactive dyes of formula (4) suitable for dyeing leather and have excellent stability in the alkaline range, see formula 4 below from col. 5-6 and col. 10, lines 6-49).



Ruhlmann et al. differs from the instant claims by not explicitly teaching that the float exhibits a pH of from 8.5 to 11 for the dyeing of leather or during said contacting said float initially has a pH of from 3.5 to 7.4 which is then set to a value of from 8.5 to 11 to fix the dye to said leather.

However, in an analogous art of method for dyeing leather, Rosenbusch teaches dyeing of leather from a common dye bath containing alkalis to give pH over 7.5, preferably 8-10 (see Derwent abstract).

Therefore, in view of the teaching of Rosenbusch, one having ordinary skill in the art at the time the invention was made would be motivated to modify the process for dyeing leather taught by Ruhlmann et al. by incorporating the alkaline pH range taught by Rosenbusch to arrive at the claimed invention because Ruhlmann et al. suggests that the dyes exhibit high fastness at alkaline conditions (see col. 10, lines 43-49).

Rosenbusch teaches that it is known in the leather dyeing art to have a common dye

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bath containing alkalis to give a pH of 8-10 (see Derwent abstract), and therefore the combination is merely applying a known technique to a known method ready for improvement to yield predictable results. Thus, a person of ordinary skill in the art would be motivated to select the instantly claimed dye formula in a process for dyeing leather at an alkaline pH with a reasonable expectation of success for obtaining very deep, full shades in a single process and the use of conventional dyeing equipment (see Rosenbusch Derwent abstract), and would expect such a process to have similar properties to those claimed, absent unexpected results.

As to claims 3-7, 30, 33, 38, 41, Ruhlmann et al. teaches the process wherein B in the formula A is $-\text{CH}_2\text{CH}_2-\text{OSO}_3\text{H}$ (see col. 3, lines 32-35 definition of Z_1 and formula (4) below); the process wherein the group represented by formula A is attached to the dye molecule via an $-\text{N}=\text{N}-$ group (see formula (4) above and col. 1, lines 32-50); the process wherein the at least one dye F is selected from the group consisting of an azo dye (see col. 1, lines 32-50 and formula (4) above); the process wherein $n=0$ (see formula 4 above); the process wherein the radical A is selected from the radical (A1) and (A2) (see col. 3, lines 32-35 definition of Z_1 , col. 5-6 and formula (4) shown above); the process wherein Q is selected from the group consisting of chlorine, bromine, iodine (see formula (4) above where R_1 is a halogen, see col. 1, lines 32-54); the process wherein Dk^1 is a substituted benzene (see formula (4) above); the process wherein said at least one dye is at least one dye represented by formula (IIb) (see formula (4) above); the process wherein said float consists of at least one dye F having the at least one

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group represented by formula A (see formula (4) above and col. 1, line 31 to col. 2, line 63).

As to claim 19, Ruhlmann et al. teaches a dyed leather obtainable by a dyeing process according to claim 1 (see col. 10, lines 7-19)

As to claims 24-26, Rosenbusch teaches the leather dyeing process wherein the pH of the aqueous float ranges from 8.5 to 10.5 (see Derwent abstract); the leather dyeing process wherein the pH of the aqueous float ranges from 8.5 to 10 (see Derwent abstract); and the leather dyeing process wherein the pH of the aqueous float ranges from 9.5 to 11 (see Derwent abstract).

6. Claims 9, 11-12, 20, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruhlmann et al. (US 5,964,900), in view of Rosenbusch (DE 2638236 A), further in view of Fennen et al. (US 2004/0025260 A1). For ease of examination, all references to the Rosenbusch text are to the Derwent Abstract Acc. No. 1978-19783A.

Ruhlmann et al. and Rosenbusch teach a process for dyeing leather as described above, however fail to teach or disclose an initial treatment at a pH from 3 to 6.5; the process wherein the dyeing occurs before retanning; and the process wherein the dyeing occurs at temperatures in the range from 10 to 60 degrees Celsius; the dyed leather used for handwear, footwear, automobiles, apparel or furniture; and the process occurring for a time of from 0.5 to 2 hours.

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However, as to claims 9, 11-12, 20, and 27, Fennen et al., in analogous art of dyeing leather with azo dyes and metal complexes thereof, teaches the process which further comprises initially treating the leather with an aqueous float comprising at least one dye F at a pH in the range from 3 to 6.5 prior to said contacting (see para. 0002 and 0005); the process wherein the dyeing occurs before retanning (see para. 0001); the process wherein said contacting occurs at temperatures in the range from 10 to 60 degrees Celsius (see para. 0022 and 0046); the dyed leather for handwear, footwear, automobiles, apparel, or furniture (see para. 0006); the process occurring for a time of from 0.5 to 2 hours (see para. 0046).

Therefore, in view of the teaching of Fennen et al., one having ordinary skill in the art at the time the invention was made would be motivated to modify the leather dyeing process taught by Ruhlmann and Rosenbusch by incorporating the process conditions and retanning step as taught by Fennen et al. to arrive at the claimed invention because all three references teach the use of azo dyes for the dyeing of leather and Fennen et al. teaches improvements over prior leather dyeing processes by use of aqueous alkaline solutions (see para. 0009). Fennen et al. clearly teaches the use of the claimed process steps, and, thus, a person of ordinary skill in the art would be motivated to combine these process steps and pH requirements with a reasonable expectation of success for obtaining a dyed leather with high color intensity, outstanding wet fastness, and excellent grain lightness (see Fennen et al. abstract) would expect such a process to have similar properties to those claimed, absent unexpected results.

As to claims 28-29, Fennen et al. teaches the process where said contacting is carried out for four hours (see para. 0046) and that due to the depth of color achieved, no additional fixation step needs to be carried out (see para. 0008), yet makes no mention of the dye fixation percentage as determined by UV/VIS spectroscopy and HPLC. It is elementary that the mere recitation of a newly discovered function or property, that are obviously present in the dyeing method of the prior art does not cause a claim drawn to distinguish over the prior art. Additionally where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an obvious characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on by providing experimental evidence. In re Swinehart, 169 USPQ 226 (CCPA 1971). Therefore, one of ordinary skill in the art at the time the invention was made could have arrived at the instantly claimed dyeing process for leather.

7. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruhlmann et al. (US 5,964,900) in view of Rosenbusch (DE 2638236 A), further in view of McHugh et al. (WO 02/20897 A1). For ease of examination, all references to the Rosenbusch text are to the Derwent Abstract Acc. No. 1978-19783A.

Ruhlmann et al. and Rosenbusch teach the process for dyeing leather as described above in regards to claim 1, however fail to disclose that the process further comprises adding an alkali metal carbonate, an alkali metal bicarbonate or an alkali

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metal hydroxide to said float during said contacting to control the pH of the float during said contacting, reacting the at least one group represented by formula A of dye F with amino groups present on a surface of said leather to covalently bond said dye F to said leather, nor the process wherein said contacting is carried out for a period of from 0.5 to 4 hours and a temperature of from 10 to 60°C.

However, as to claims 35-37, McHugh et al., in analogous art of process for dyeing leather, teaches that the process further comprises adding an alkali metal carbonate, an alkali metal bicarbonate or an alkali metal hydroxide to said float during said contacting to control the pH of the float during said contacting (see page 12); the process further comprising reacting the at least one group represented by formula A of dye F with amino groups present on a surface of said leather to covalently bond said dye F to said leather (see pages 4-6 and 13); nor the process wherein said contacting is carried out for a period of from 0.5 to 4 hours and a temperature of from 10 to 60°C (see pages 11-13, process step c).

Therefore, in view of the teaching of McHugh et al., one having ordinary skill in the art at the time the invention was made would be motivated to modify the leather dyeing process taught by Ruhlmann and Rosenbusch by incorporating the alkali metal carbonate addition, covalent bonding, and time/temperature of the dyeing process taught by McHugh et al. to arrive at the claimed invention because Ruhlmann teaches that conventional dying processes may be employed for the novel processes and the use of reactive dyes (see Ruhlmann col. 3, lines 44-57). McHugh et al. clearly teaches the claimed use of alkali metal carbonates to control the pH of the dye float, that the

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dyes are covalently bonded to the leather, and the contact time and temperature, and, thus, a person of ordinary skill in the art would be motivated to incorporate these process steps with a reasonable expectation of success for obtaining a dyed leather with outstanding grain tightness, extremely deep color intensity, outstanding color fastness, and simplifying the dyeing process (see McHugh et al. page 5) and would expect such a process to have similar properties to those claimed, absent unexpected results.

8. Claims 34 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruhlmann et al. (US 5,964,900) in view of Rosenbusch (DE 2638236 A). For ease of examination, all references to the Rosenbusch text are to the Derwent Abstract Acc. No. 1978-19783A.

Ruhlmann et al. and Rosenbusch fail to explicitly disclose the chemical formulas represented by formulas (III) through (XV) as claimed.

However, one having ordinary skill in the art at the time the invention was made would expect that the similar structured dyes claimed in these claims would carry out the equivalent function of dyeing leather. The burden is shifted to the Applicant to show unexpected results in the dyeing process achieved from these particular dye formulas that are structurally similar to the dyes taught by Ruhlmann et al. and Rosenbusch as described above.

Response to Arguments

9. Applicant's arguments filed on January 5, 2011 regarding claims 1-7, 19-20, 24-26, 30, and 33 as rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,964,900 (Ruhlmann) in view of DE 2 638 236 (Rosenbusch) have been fully considered but they are not persuasive.

The Applicant argues that the teachings of the cited references are divergent because Ruhlmann relates to reactive dyes where the pH at dyeing is necessary to fix the dye to leather and Rosenbusch discloses acidic and basic dyes in a common aqueous solution of a pH of at least 7.5, but there is no disclosure of reactive dyes in the Rosenbusch abstract. The Applicant further argues that the substrate to be dyed in these two cited references are different: Rosenbusch dyes leather while the substrate preferably dyed in Ruhlmann is cellulose fibers.

However, the type of dyes taught by the two references is irrelevant to the claimed subject matter. Ruhlmann teaches that the reactive dyes of formula (4) are suitable for dyeing a very wide range of materials, such as **leather**, wool, polyamide fibers, and cellulosic fiber materials of all kinds (see col. 10, lines 6-14). Thereby, Ruhlmann clearly teaches that leather substrates can be dyed by the claimed dye formula. Both Ruhlmann and Rosenbusch are analogous art of dyeing leather, and thereby there is clearly motivation to combine the cited references. All disclosures of the prior art, including non-preferred embodiment, must be considered. See *In re Lamberti and Konort*, 192 USPQ 278 (CCPA 1967); *In re Snow* 176 USPQ, 328, 329 (CCPA 1973).

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The Applicant argues that Ruhlmann does not explicitly state the pH of the float during the process of dyeing, but discloses adding a large amount of sodium hydroxide and/or sodium carbonate during the dyeing at the dyeing prescriptions at columns 14 and 15, meaning that these dyeing conditions are strongly basic (alkaline) and therefore the pH conditions for dyeing would exceed a pH of 11 as claimed.

However, the Rosenbusch reference is applied to teach that it is known in the leather dyeing art to conduct dyeings at above pH 7.5 and preferably at between pH 8 and pH 10 (see Rosenbusch translation, page 5, lines 1-8). Therefore, one of ordinary skill in the art at the time the invention was made could have chosen a known dyeing pH with a known dye formula to arrive at the instantly claimed process.

The Applicant further argues that Ruhlmann contains no disclosure of any pHs at the beginning of the dyeing processes, and therefore fails to disclose a pH of 3.5 to 7.4 as claimed.

However, the claim reads "wherein during said contacting said float has a pH of from 8.5 to 11 or during said contacting said float initially has a pH of from 3.5 to 7.4 which is then set to a value of from 8.5 to 11 to fix the dye to said leather" (emphasis added). Since this is "or" statement, as long as the pH of from 8.5 to 11 is taught, the claim is obvious over the prior art. Therefore, the Applicant's argument is moot, as there is no requirement for a beginning pH.

The Applicant argues that Rosenbusch (the abstract) does not remedy these deficiencies because it does not provide any teaching or motivation to lower the pH of Ruhlmann during the dyeing process to mildly alkaline conditions.

However, this argument is moot, as there is no requirement in the claim language that the pH be lowered during the dyeing process to mildly alkaline conditions, only that during said contacting said float has a pH of from 8.5 to 11, which is clearly taught by Rosenbusch (see abstract).

The Applicant argues that there is no motivation to modify the dyeing conditions of Ruhlmann based on the teaching of Rosenbusch because one of ordinary skill in the art would recognize that the alkaline conditions of Ruhlmann would be unsuitable for the substrates of Rosenbusch and therefore one would not consider dyeing leather with the dyes as claimed at the pH range as claimed.

However, Ruhlmann does teach that the reactive dyes of formula (4) are suitable for dyeing leather (see col. 10, lines 7-10). Therefore, one of ordinary skill in the art would have been plenty motivated to select a known leather dyeing method pH in combination with a known dye for dyeing leather, precisely because it is well known that alkaline conditions damage leather.

The Applicant argues that the cited references also fail to disclose dyeing processes where the dye fixation as claimed is achieved during a dye process carried out for at most 4 hours, and that there is no disclosure or suggestion in the cited references of such results.

This argument is moot, as there is absolutely no language in instant claim 1 requiring that the dyeing process is carried out during a certain time period. If these are in fact unforeseen results of the instant invention, then the appropriate claim limitations

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need to be added to the independently claimed method to clearly point out and claim the Applicant's process for dyeing leather.

The Applicant argues that both cited references fail to disclose the dyes recited in claim 34 and that since the dyes of claim 34 are novel in view of the cited references, claim 34 is distinguished from the cited reference for at least this reason.

However, the instant claims are still to a process for dyeing leather and therefore, the primary weight of patentability is placed on the active method steps themselves. The Applicant has still not overcome the U.S.C. 112, 2nd paragraph rejections that have been applied since the second non-final office action.

Accordingly, the rejections are maintained.

10. Applicant's arguments filed on January 5, 2011 regarding claims 9, 11-12, 20, and 27-29 rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,964,900 (Ruhlmann) in view of DE 2 638 236 (Rosenbusch) and in further view of US 2004/0025260 (Fennen) have been fully considered but they are not persuasive.

The Applicant argues that Ruhlmann discloses dyeing where dye fixation is carried out in strongly alkaline conditions, and Fennen teaches away from alkaline conditions during dyeing. The Applicant continues that the teachings of these cited references are divergent and therefore there is no motivation to combine the references.

However, all three references teach the use of azo dyes for the dyeing of leather, making them analogous art and a reasonable combination. Additionally, Fennen et al. teaches improvements over prior leather dyeing processes by use of aqueous alkaline

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solutions (see Fennen para. 0009). A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. V. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. Denied*, 469 U.S. 851 (1984), see MPEP 2141.02, MPEP 2145X.D. 1.

The Applicant argues that the present claims are also distinguished from Fennen because this cited reference fails to disclose groups corresponding to group(s) represented by formula A of the present claims.

However, Fennen is a secondary reference, so it is not required to teach all of the limitations of the instant claims. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The Applicant argues that the pH conditions of Fennen relate to reactions where a dye is covalently bound to functional groups of a polyfunctional organic acid, and that there is no disclosure that the pH conditions would result in a vinyl sulfone group being bound to leather, especially because Fennen contains no disclosure of, e.g. alkaline-detachable groups of groups corresponding to those of e.g. at least claims 7 and 32. However, there is no explicit requirement in the claim language that the group A compounds (vinyl sulfone groups) are covalently bound to leather in the claimed process. If this covalent bonding step is a critical component, then the appropriate

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claim limitations need to be added to the independent claim process to clearly point out and claim the Applicant's process for dyeing leather.

Accordingly, the rejections are maintained.

11. Applicant's arguments filed on January 5, 2011 regarding the obviousness type double patenting rejection and 35 U.S.C. 112, second paragraph rejection, have been fully considered but they are not persuasive.

As to the obviousness double patenting rejection, the Applicant argues that in the US 11/628,659 copending application X is alkyl or alkoxy groups, which are electron donating, whereas the instant independent claim X is an electron withdrawing group that withdraws electron density from group (A) thereby making (A) attractive to electrons,. As the claims are to a **process** for dyeing leather, one of ordinary skill in the art could have incorporated any type of dye and would have expected that the process would have similar properties to those claimed, as the dye composition itself does not distinguish it from the process steps. Burden is shifted to the Applicant to provide **evidence** that there is a patentably distinct difference between the electron donating groups at the claimed pH versus the electron donating groups.

As to the 35 U.S.C. 112, second paragraph rejection of claims 1 and 9, there is still only one active method steps for dyeing leather: wherein during said contacting, said float has a pH of from 8.5 to 11 or during said contacting said float initially has a pH of from 3.5 to 7.4, which is then set to a value of from 8.5 to 11 to fix the dye to said leather. There are no details provided for how this alkaline pH range is achieved and

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maintained (such as chemicals added or the novelty of the dye chemistry at that particular dye range), nor the time frame for dyeing of the leather, or other steps for dyeing leather taught in the instant specification. The additional steps now included in various dependent claims do not overcome the 112 rejection of the **independent** claim because they are not incorporated into the independent claim.

As to the 35 U.S.C. 112, second paragraph rejection of claim 1, the Applicant argues that the electron attracting radicals X are defined in the specification and claim 2, and the alkaline detachable group Q is defined in the specification. This is true, however the claim itself is still not clearly defined without these definitions.

Accordingly, these rejections are maintained.

12. Applicant's arguments filed on February 24, 2011 regarding claims 1-7, 19-20, 24-26, 30, and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,964,900 (Ruhlmann) in view of DE 2 638 236 (Rosenbusch) have been fully considered but they are not persuasive.

The Applicant argues that there is no *prima facie* case of obviousness against the present claims in view of the cited references because there is no reasonable expectation of success regarding the Office's proposed modification to Ruhlmann. The Applicant argues there is no disclosure in Rosenbusch that the pH of the float would influence the chemistry of the reactive dyes in Ruhlmann and that rather, Rosenbusch discloses that this pH is necessary so that "leather can be dyed simultaneously with basic and acidic dyestuffs together in aqueous floats without the occurrence of mutual

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precipitations of the oppositely charged dyestuffs by using solutions of combinations of these dyestuffs in the presence of alkalis and conducting these dyeings at above pH 7.5 and preferably at between pH 8 and pH 10."

However, adjusting pH is an extremely well known process in the dyeing arts. Rosenbusch is cited to teach that it is known in processes for dyeing leather to dye at a pH of 8.5 to 11, regardless of the purpose for selecting that pH. Rationale different from applicant is permissible. The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant, *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); *In re Dillon*, 91 9 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990) *cert. denied*, 500 U.S. 904 (1991). Also, while there must be motivation to make the claimed invention, there is no requirement that the prior art provide the same reason as the applicant to make the claimed invention, *Ex parte Levengood*, 28 USPQ2d 1300, 1302 (Bd. Pat. App. & Inter. 1993).

The Applicant further argues that in the pH conditions of the present claims, this "the at least one radical X present as an SO₃H group" can be deprotonated during the claimed processes so that the dye F is an anionic dye and the groups as claimed present in the molecular structure (e.g. Kk¹) are anionic or neutral substituents and therefore the dyes as claimed would not be cationic dyes.

However, there is no requirement in the claim language that limits the claimed dye F to be an anionic dye, and therefore this argument is moot. It is also irrelevant that

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the dyes as claimed would not be cationic dyes, as the claimed process uses “comprises” claim language. “Comprising” leaves the claim open for the inclusion of unspecified ingredients even in major amounts, see *Ex parte Davis et al.*, 80 USPQ 448 (PTO Ed. App. 1948). Also, the broad “comprising” and “containing” terminology do not exclude the presence of other ingredients (or process steps) in the composition, unlike the narrow “consisting of” language, see *Swain v. Crittendon*, 332 F.2d 820, 14 USPQ 811 (CCPA 1964).

The Applicant argues that Rosenbusch prepares a dye float having anionic and cationic dyes, where the pH is at least 7.5 so that these chemically different dyes do not agglomerate and precipitate out of the floats, and that Rosenbusch fails to disclose that the pH of a dye float results in dyes in the anionic state. The Applicant also argues that Rosenbusch fails to disclose or suggest that the pH of the dye float would effect the dyeing of leather with dyes that are anionic or neutral.

However, as stated above, there is no limitation in the instant claim 1 that limits that the dye float results in dyes in the anionic state or that the pH of the dye float effects the dyeing of leather with dyes that are only anionic or neutral, and therefore this argument is moot. Additionally, since Rosenbusch teaches anionic dyes, then this is further evidence that it is known that the instantly claimed pH is useful to dye leathers with anionic dyes, regardless of whether or not a cationic dye is also present. Even though the claimed dye formula is taught, there is no claimed specificity as to the chemistry that occurs when the claimed dye contacts the leather in the instantly claimed

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process. Therefore, the Applicant's arguments to these points are moot until they are actively incorporated into the claimed subject matter.

The Applicant argues that the cited references fail to disclose the dyes as claimed in claims 34 and 38-40 and that since the dyes of claim 34 are novel in view of the cited references, claims 34 and 38-40 are distinguished from the cited reference for at least this reason.

However, the instant claims are still to a process for dyeing leather and therefore, the primary weight of patentability is placed on the active method steps of this process themselves. The Applicant has still not overcome the U.S.C. 112, 2nd paragraph rejections that have been applied to the independent claim since the second non-final office action.

Accordingly, the rejections are maintained.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATIE HAMMER whose telephone number is (571)270-7342. The examiner can normally be reached on Monday to Friday, 10:00am EST to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harold Y Pyon/
Supervisory Patent Examiner, Art
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/KLH/

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May 5, 2011